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THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 22 (90/003,586)  
Paper No. 20 (08/335,981)

**MAILED**

SEP 29 1999  
PAT.&T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte HORACE L. FREEMAN and HEE K. YOON

Appeal No. 1997-1434  
Reexamination Control No. 90/003,586<sup>1</sup>  
and Application No. 08/335,981<sup>2</sup>

ON BRIEF

Before STONER, Chief Administrative Patent Judge, and NASE and CRAWFORD, Administrative Patent Judges.

CRAWFORD, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 33, which are all of the claims pending in this application.

<sup>1</sup> Reexamination of U.S. Patent No. 5,088,484 issued February 18, 1992, filed October 3, 1994. This proceeding is a reexamination of Application 07/593,852 filed October 5, 1990, now U.S. Patent No. 5,088,484 issued February 18, 1992.

<sup>2</sup> Reissue of U.S. Patent No. 5,088,484 issued February 18, 1992 to Johnson & Johnson Ortho, Inc., filed November 8, 1994. The reissue proceeding was merged with the above-noted reexamination on August 11, 1995.

The appellants' invention relates to an orthopedic cast bandage. An understanding of the invention can be derived from a reading of exemplary claim 1, which appears in the appendix to the appellants' brief.

The Prior Art

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Parker	3,097,644	Jul. 16, 1963
Paxit	878,838	Nov. 25, 1987
Buese et al. (Buese)	4,898,159	Feb. 6, 1990
Gasper et al. (Gasper)	4,968,542	Nov. 6, 1990

(filed Sept. 3, 1986)

The Rejections

Claims 1 through 5, 9, 12, 15, 19, 20, 23 and 24 stand rejected under 35 U.S.C. § 102(b)<sup>3</sup> as being anticipated by Buese.

Claims 6-8, 10, 11, 13, 14, 16-18, 21, 22, 25-27, 29 and 30 stand rejected under 35 U.S.C. § 103 as being unpatentable over Buese in view of Gasper.

Claim 28 stands rejected under 35 U.S.C. § 103 as being unpatentable over the references as applied to claim 25 above and further in view of Parker.

Claims 31-33 stand rejected under 35 U.S.C. § 103 as being unpatentable over Buese in view of Paxit.

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<sup>3</sup> As the Buese issue date is November 6, 1990, Buese is not a 102(b) reference. Therefore, we will treat this rejection as if made under 35 U.S.C. § 102(e).

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer and the supplemental answer for the examiner's complete reasoning in support of the rejections, and to the brief and reply brief for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

We turn first to the examiner's rejection of claims 1 through 5, 9, 12, 15, 19, 20 and 23 through 24 under 35 U.S.C. § 102 as being anticipated by Beuse. We initially note that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987).

The examiner finds that Buese discloses:

an orthopedic cast bandage comprising an open mesh, fiberglass tape (col. 2, line 39), a hardenable liquid resin (col. 2, line 40) coated on the fibrous tape and at least one

coloring agent (col. 5, lines 5-7) disposed on a portion of the tape. The open mesh fibrous tape comprises fiber glass fibers (col. 2, lines 49-41). [Office Action mailed September 18, 1995, page 2]

Appellants argue that Buese does not disclose "the coloring agent being stably retained by the fibrous tape while the tape is in the soft state in the presence of the hardenable liquid resin", as recited in claim 1. The examiner, replies:

Appellant argues that Buese does not disclose whether the coloring agent is applied while to [sic] the fabric is the soft "state". However, when the coloring agent is applied is a method step that was not given weight in the article claims. [Supplemental Answer at page 2].

We do not view the requirement in claim 1 that the coloring agent be stably retained by the fibrous tape while the tape is in the soft state in the presence of hardenable liquid resin to be a method limitation. The specification discloses that in the past the pigment or dye was added to the liquid resin (before the cast was cured). Therefore, the dye or pigment could stain tables, floors and other surfaces which came in contact with the colored liquid resin (Col. 1, lines 47- 51). The specification also discloses:

Advantageously, the coloring agent disposed on or in the fibers of the fibrous tape is stably retained by the fibers in the presence of the hardenable liquid resin for substantial periods of time, for example, from several months to in excess of a year, without any adverse effect by the liquid resin on the coloring agent and without any

adverse effect by the coloring agent on the liquid resin [Col. 2, lines 41-48]

As such, because the coloring agent is stably retained by the fibrous tape while the tape is soft and in the presence of the liquid resin, unwanted coloring of surfaces by colored liquid resin is avoided. In addition, the stability of the coloring agent in the fibrous tape in the presence of the resin prior to hardening prevents any adverse effects on the resin such as premature hardening (Col. 6, lines 21-22). Therefore, the recitation in claim 1 concerning the stability of the coloring agent in the soft fibrous tape in the presence of the hardenable resin is directed to a property of the casting tape itself. As such, the recitation is a limitation which must be addressed in the 102 rejection. As the examiner has not found that Buese discloses a cast which has a fibrous tape having a dye or coloring agent stably retained in the fibrous tape while the tape is in the soft state in the presence of hardenable resin, the examiner has failed to establish a prima facie case of anticipation of claim 1 and claims 2 through 5, 9, and 12 dependent therefrom. As such, we will not sustain this rejection as it is directed to claims 1 through 5, 9, and 12.

In regard to claim 15, we note that this claim requires recites:

at least one dye penetrated into or chemically bound to at least a portion of the fibrous tape beneath said hardenable liquid

resin coating while the tape is in a soft state, the dye being stably retained by the fibrous tape in the presence of the hardenable liquid resin. . .

As such, claim 15 requires that a dye be stably retained by the fibrous tape while the tape is in the soft state in the presence of the hardenable liquid resin. In view of the above discussion in regard to claim 1, we will not sustain this rejection as it is directed to claim 15 and claims 19 , 20 and claims 23 dependent therefrom.

Claim 24 recites:

at least one dye penetrated into or chemically bound to at least a portion of the fibrous tape while the tape is in the soft state, the dye being stably retained in the presence of the hardened polymeric matrix, wherein after the hardened polymeric matrix becomes hard there is substantially no adverse effect on the dye.

As such, claim 24 requires that the dye penetrate into or be chemically bound to the fibrous tape and that after the polymeric matrix is hardened, the dye is not adversely affected by the hardened polymeric matrix. We will not sustain the rejection as it is directed to claim 24 because the examiner has failed to establish that Buese discloses a dye that is not adversely affected by the hardening of the polymeric matrix material. The binder containing the dye in Beuse is put on the substrate prior to the application of the resin as an indicator so that the cutting machine can be indexed (Col. 5, lines 5 to 8; Col. 6,

lines 18 to 32). There is no discussion about the state of the dye after the resin hardens.

We turn next to the rejection of claims 6 through 8, 10, 11, 13, 14, 16 through 18, 21, 22, 25 through 27, 29, and 30 under 35 U.S.C. § 103 as being unpatentable over Beuse' 159 in view of Gasper. The examiner relies on Gasper for teaching an open mesh fibrous tape having at least two color agents disposed on the tape and a fibrous tape comprised of polyester.

Claims 6 through 8, 10, 11, 13, and 14 depend from claim 1 and claims 16 through 18, 21, 22 depend from claim 15.

Therefore, each of these claims requires that the coloring agent or dye be stably retained by the fibrous tape while the tape is in the soft state and in the presence of the liquid resin. Buese does not suggest anything about the stability of the dye while the tape is in the soft state and in the presence of liquid resin. Gasper likewise does not disclose or suggest anything about the stability of a coloring agent or dye while the tape is in a soft state and in the presence of the liquid resin. In fact, Gasper does not mention dye or coloring agents at all. Therefore, as to the above referenced claims, there is no teaching or suggestion to provide a cast in which the tape has a coloring agent or dye which is stable while the tape is in the soft state and in the presence of the liquid resin. As such, as

to these claims, the examiner has failed to establish a prima facie case of obviousness.

As to claim 25 from which claims 26, 27, 29 and 30 depend, there is no disclosure, suggestion or teaching of the method steps recited in claim 25 in either Buese or Gasper i.e. Buese and Gasper do not disclose contacting the fibrous tape with a sublimable dye or any of the steps which follow. As such, the examiner has failed to establish a prima facie case of obviousness in regard to these claims as well and therefore we will not sustain the rejection as it is directed to claims 25, 26, 27, 29, and 30.

We turn next to the examiner's rejection of claim 28 over Beuse in view of Gasper and as applied to claim 25 above, and further in view of Parker. The examiner has cited Parker for teaching that a casting material can be made of a multi filament yarn of cotton and synthetic material and concluded:

It would have been obvious to one of ordinary skill in the art at the time the invention was made that a multiple filament yarn as taught by Parker could be substituted for the yarns as disclosed by Buseses. [Office Action mailed September 18, 1995, page ].

We will not sustain this rejection as Parker does not cure the deficiencies noted above for Buese and Gasper in regard to the method steps recited in claim 25 from which claim 28 depends. As such, the examiner has failed to establish a prima facie case of obviousness in regard to claim 28.

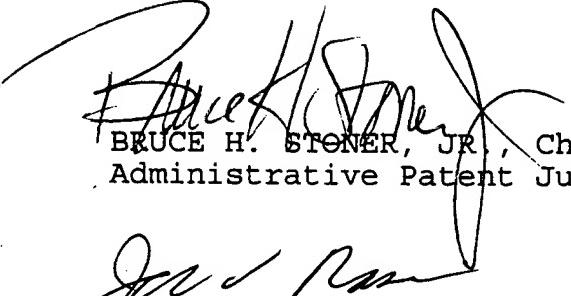
We turn finally to the examiner's rejection of claim 31 to 33 under 35 U.S.C. 103 as being unpatentable over Buese in view of Paxit. The examiner has cited Paxit for teaching a polyester fabric that may be printed with a pattern by depositing a dye on the fabric. The examiner reasons:

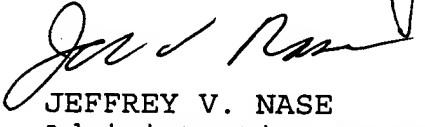
It would have been obvious to one of ordinary skill in the art at the time the invention was made that polyester fibers that could be soaked with a dye as taught by Paxit could be substituted for the fibers as disclosed by Buese. The polyester fibers are suitable for the impregnation of a resin and a dye to form a hardenable cast that has a pleasant appearance. [Office Action mailed September 18, 1995, page 4].

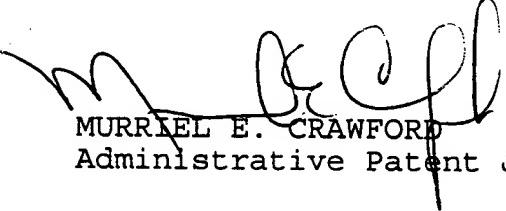
We find no suggestion in either Paxit or Buese that the casting material of Buese be comprised of polyester. To the contrary, Paxit relates to decorated polymeric sheets used in roofs or patio coverings or as facia boards or decorative wall paneling (Page 2). There is no discussion in Paxit concerning orthopedic casts. In our view the only suggestion to combine the disparate teachings of Buese and Paxit stems from impermissible hindsight gleaned from appellants' own disclosure. In view of the foregoing, we will not sustain this rejection.

The decision of the examiner is reversed.

**REVERSED**

  
BRUCE H. STONER, JR., Chief  
Administrative Patent Judge

  
JEFFREY V. NASE  
Administrative Patent Judge

  
MURRIEL E. CRAWFORD  
Administrative Patent Judge

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